

**In the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the Application.

**Listing of Claims:**

1. (Currently Amended) A method for managing network resources for copying transfer of data stored on a first data storage system to a second data storage system, wherein each data storage system includes an array of data storage devices on which data involved in the copying is stored in a data storage environment, the method comprising the computer-executed steps of: requesting from a server for services on an internet network, a bandwidth for data copying transfer from a first data storage system to a second data storage system over the internet network based on the amount of data to be copied transferred; copying transferring data in response to a bandwidth allocation from the server based on the request; monitoring internet network traffic characteristics during the data copying transfer; and responsive to the monitored internet network traffic characteristics, selectively requesting an effect on bandwidth allocation.
2. (Original) The method of claim 1, wherein the effect requested is to increase bandwidth allocation.
3. (Currently Amended) The method of claim 1, wherein the request is in accordance with a Java-based[.] protocol.

4. (Currently Amended) The method of claim 3, wherein the effect requested is to increase bandwidth allocation is based on the data copying ~~transfer~~ not meeting at least one performance criterion.
5. (Currently Amended) The method of claim 4, wherein the at least one performance criterion is based on a predetermined data copying ~~transfer~~ rate.
6. (Currently Amended) The method of claim 5, wherein the effect requested is to increase bandwidth allocation is based on the data copying ~~transfer~~ lagging behind based on the predetermined data copying ~~transfer~~ rate.
7. (Currently Amended) The method of claim 6, wherein the monitored internet network traffic characteristics include information regarding packet latency and the data copying ~~transfer~~ lagging behind is further based on packet latency.
8. (Currently Amended) The method of claim 6, wherein the monitored internet network traffic characteristics include information regarding packet loss and the data ~~transfer~~ copying lagging behind is further based on packet loss.
9. (Currently Amended) The method of claim 1, wherein the data copying ~~transfer~~ is at least part of a data replication process.

10. (Currently Amended) The method of claim 9, wherein the request is in accordance with a Java-based[.] protocol.

11. (Currently Amended) The method of claim 10, wherein the effect requested is to increase bandwidth allocation is based on the data copying ~~transfer~~ not meeting at least one performance criterion.

12. (Currently Amended) The method of claim 11, wherein the at least one performance criterion is based on a predetermined data copying ~~transfer~~ rate.

13. (Currently Amended) The method of claim 12, wherein the effect requested is to increase bandwidth allocation is based on the data copying ~~transfer~~ lagging behind based on the predetermined data copying ~~transfer~~ rate.

14. (Currently Amended) The method of claim 13, wherein the monitored internet network traffic characteristics include information regarding packet latency and the data copying ~~transfer~~ lagging behind is further based on packet latency.

15. (Currently Amended) The method of claim 12, wherein the monitored internet network traffic characteristics include information regarding packet loss and the data copying ~~transfer~~ lagging behind is further based on packet loss.

16. (Original) The method of claim 9, wherein the data replication is carried out in accordance with a replication policy.

17. (Original) The method of claim 16, wherein the replication policy defines replication groups including devices distributed between the first and second data storage systems and the data replication process is completed when all devices in the replication groups are synchronized.

18. (Currently Amended) A networked computer system for managing network resources for copying of data from a first data storage system to a second data storage system, wherein each data storage system includes an array of data storage devices on which data involved in the copying is stored ~~in a data storage environment~~, the networked computer system comprising:

a first data storage system;

a second data storage system in communication with the first data storage system over an internet network;

a server for providing internet services over the internet network; and

a network communication device capable of enabling the method steps of:

requesting from a server for services on an internet network, a bandwidth for data copying transfer from the first data storage system to the second data storage system over the internet network based on the amount of data to be copying transferred;  
copying transferring data in response to a bandwidth allocation from the server based on the request;

monitoring internet network traffic characteristics during the data copying ~~transfer~~; and responsive to the monitored internet network traffic characteristics, selectively requesting an effect on bandwidth allocation.

19. (Currently Amended) The system of claim 18, wherein the data copying ~~transfer~~ is at least part of a data replication process.

20. (Currently Amended) The system of claim 19, wherein the request is in accordance with a Java-based[.] protocol.

21. (Currently Amended) The system of claim 20, wherein the effect requested is to increase bandwidth allocation is based on the data copying ~~transfer~~ not meeting at least one performance criterion.

22. (Currently Amended) The system of claim 21, wherein the at least one performance criterion is based on a predetermined data copying ~~transfer~~ rate.

23. (Currently Amended) The system of claim 22, wherein the effect requested is to increase bandwidth allocation is based on the data copying ~~transfer~~ lagging behind based on the predetermined data copying ~~transfer~~ rate.

24. (Currently Amended) The system of claim 23, wherein the monitored internet network traffic characteristics include information regarding packet latency and the data copying ~~transfer~~ lagging behind is further based on packet latency.

25. (Currently Amended) The system of claim 22, wherein the monitored internet network traffic characteristics include information regarding packet loss and the data copying ~~transfer~~ lagging behind is further based on packet loss.

26. (Original) The system of claim 19, wherein the data replication is carried out in accordance with a replication policy.

27. (Original) The system of claim 26, wherein the replication policy defines replication groups including devices distributed between the first and second data storage systems and the data replication process is completed when all devices in the replication groups are synchronized.

28. (Currently Amended) A program product for managing network resources for copying of data stored in a data storage environment, the program product being for management of data and being comprised of:

computer-executable logic contained on a computer-readable medium and which is configured for causing the following computer-executed steps to occur:

Applicant: Yao Wang, *et al.*  
U.S.S.N.: 10/017,304  
Filing Date: December 11, 2001  
EMC Docket No.: EMC-01-201

requesting from a server for services on an internet network, a bandwidth for data copying from a first data storage system to a second data storage system over the internet network based on the amount of data to be copying ~~transferred~~;

copying ~~transferring~~ data in response to a bandwidth allocation from the server based on the request;

monitoring internet network traffic characteristics during the data copying ~~transfer~~; and

responsive to the monitored internet network traffic characteristics, selectively requesting an effect on bandwidth allocation.